Appl. No.

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**December 30, 2003** 

## AMENDMENTS TO THE CLAIMS

As indicated below, please amend Claims 1 and 28 and cancel Claims 2 and 12-17 without prejudice.

## **Listing of Claims:**

1. (Currently amended) A dental implant system, comprising:

an dental implant including a body portion and an abutment portion that is integrally formed with the body portion, the implant body portion located at a distal end and configured to lie at least partially below a crest of a patient's jawbone, the abutment portion located at a proximate end of the implant and configured to lie at least partially above the crest of the patient's jawbone, the abutment portion comprising a flared portion, a shoulder portion and a final restoration portion, the shoulder portion lying between the flared portion and the final restoration portion, the dental implant further including a bore that extends generally along the longitudinal axis of the dental implant from a top surface of the abutment portion, the bore including an notch configured to releasably receive prongs on a mating component the abutment portion including a bone apposition surface having a top edge with a scalloped shape; and

a healing cap including a body portion having a proximal and a distal end, the body portion defining an inner cavity which is sized and adapted so that the healing cap fits over the final restoration portion, the healing cap further including a tissue retention flange at the distal end that extends below the shoulder portion when the healing cap is coupled to the abutment portion.

## 2. (Canceled)

- 3. (Original) The dental implant system of Claim 1, wherein the body portion and the abutment portion of the implant are machined from a single piece of material.
- 4. (Original) The dental implant system of Claim 1, wherein the tissue retraction flange also extends away from the flared portion.
- 5. (Original) The dental implant system of Claim 1, wherein a gap is formed between the tissue retraction flange and the flared portion.

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6. (Original) The dental implant system of Claim 1, wherein the body portion of the healing cap includes a base portion that is configured to rest at least partially on the shoulder portion of the abutment portion.

- 7. (**Original**) The dental implant system of Claim 1, wherein the body portion includes a bone apposition surface.
- 8. (Original) The dental implant system of Claim 1, wherein the healing cap is white.
- 9. (Original) The dental implant system of Claim 1, wherein the healing cap has a color that is substantially the same a natural tooth.
- 10. (**Original**) The dental implant system of Claim 1, wherein the abutment portion and the healing cap have round cross-sections.
- 11. (**Original**) The dental implant system of Claim 1, wherein the abutment portion and the healing cap have non-round cross-sections.

## 12-17. (Canceled) .

- 18. (Original) The dental implant system of Claim 1, in combination with a coping for creating a final restoration, the coping comprising a body portion having a proximal end, a distal end and an inner surface that defines an internal cavity and at least one standoff that extends from the inner surface towards a center of the internal cavity.
- 19. (Original) The dental implant system of Claim 18, wherein the at least one standoff extends at least about 25 microns from the inner surface.
- 20. (**Original**) The dental implant system of Claim 19, wherein the at least one standoff extends less than about 50 microns from the inner surface.
- 21. (Original) The dental implant system of Claim 18, wherein the coping is made of a material that can be melted and removed from a mold during an investment casting process.
- 22. (Original) The dental implant system of Claim 21, wherein the coping is made of plastic.
- 23. (**Original**) The dental implant system of Claim 22, wherein the coping is made from a material that is suitable for forming a portion of the final restoration.
- 24. (Original) The dental implant system of Claim 23, wherein the coping is made of gold.

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25. (Original) The dental implant system of Claim 23, wherein the coping is made of a ceramic material.

- 26. (Original) The dental implant system of Claim 18, wherein the at least one standoff has a tapered shape.
- 27. (Original) The dental implant system of Claim 18, further comprising a flanged region that configured to rest upon a shoulder of a final abutment.
- 28. (Currently amended) A method for installing a prosthetic tooth, comprising the steps of:

inserting a distal end of a body portion of a single stage dental implant having a body portion, and an abutment portion and an internal bore having including an notch into a patient's jawbone during a first stage surgery, the abutment portion having a bone apposition surface having a top edge that closely approximates e the shape of the naturally occurring contours of a patient's bone-tissue morphology;

aligning the top edge of the bone apposition surface with the contours of the patient's bone-tissue morphology;

engaging a lever arm or prong of a matting component to the notch in the internal bore to releaseably couple a mating component to the dental implant,

coupling a healing cap to an the abutment portion of the combination, during first stage surgery, such that a tissue retraction flange of the healing cap extends below a shoulder portion of the abutment portion,

removing the healing cap from the abutment portion during a second stage surgery, and

taking an impression of the <u>abutment portion combination during the second stage</u> surgery after the healing cap has been removed from the abutment portion.

- 29. (Original) A method as in Claim 28, wherein the step of coupling a healing cap to an abutment portion of the combination, further includes using a healing cap screw to couple the healing cap to the abutment portion.
  - 30. (Original) A method as in Claim 28, further comprising providing an impression cap with an injection port and a plurality of vent holes; positioning the impression cap onto the abutment portion of the implant; and

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injecting a first impression material into the impression cap through the injection port until the first impression material is extruded through at least one of the vent holes.

- 31. (**Original**) A method as in Claim 30, wherein the step of positioning the impression cap onto the abutment portion includes snapping the impression cap onto the shoulder of the abutment portion.
- 32. (Original) A method as in Claim 30, further including the steps of taking an impression of the patient's mouth by placing an impression tray filed with a second impression material over the impression cap and removing the impression tray and the impression cap from the patient's mouth.
- 33. (**Original**) A method as in Claim 30, further including modifying the shape of the abutment portion.
- 34. (Original) A method as in Claim 30, wherein the step of injecting the first impression material into the impression cap includes inserting a tip of a syringe filled with the first impression material into the injection port of the impression cap.
  - 35. (Original) A method as in Claim 28, further comprising:

providing a coping having a body portion that comprises a proximal end, a distal end and an inner surface that defines an internal cavity and at least one standoff that extends from the inner surface towards a center of the internal cavity;

providing an analogue of the abutment portion of the dental implant, placing the coping over the analogue;

applying a material suitable for investment casting to an outer surface of the coping;

encasing the coping and the material suitable for investment casting in an investment material;

melting the coping and the material suitable for investment casting; removing the coping and the material suitable for investment casting from the investment material; and

filling a cavity within the investment material with a material suitable for forming a part of a final restoration.